(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 23 June 2005 (23.06.2005)

PCT

(10) International Publication Number WO 2005/055951 A3

- (51) International Patent Classification7: C07D 471/04, A61K 31/437
- (21) International Application Number:

PCT/US2004/041081

- (22) International Filing Date: 8 December 2004 (08.12.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:

2003135482 8 December 2003 (08.12.2003)

- (71) Applicant (for all designated States except US): MEDI-VATION, INC. [US/US]; 501 Second Street, Suite 211, San Francisco, CA 94107 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): BACHURIN. Sergey, Olegovitch [RU/RU]; Institute of Physiologically Active Compounds, Russian Academy of Sciences, 142432, Chernogolovka, Moscow Region, IPAC RAS (RU). GRIGORIEV, Vladimir, Viktorovich [RU/RU]; Institute of Physiologically Active Compounds, Russian Academy of Sciences, 142432, Chernogolovka, Moscow Region, IPAC RAS (RU).
- (74) Agents: POLIZZI, Catherine, M. et al.; Morrison & Foerster LLP, 755 Page Mill Road, Palo Alto, CA 94304 (US).

- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments
- (88) Date of publication of the international search report: 8 December 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS AND COMPOSITIONS FOR SLOWING AGING

(57) Abstract: The present invention provides a pharmacological agent based on derivatives of hydrogenated pyrido (4,3-b) indoles and uses thereof. Specifically, the invention provides a geroprotector in the series of hydrogenated pyrido (4,3-b) indoles (several derivatives), which can be used for slowing aging, prolonging lifespan of an individual or cells in an individual, and/or improving quality of life of an individual developing or having a risk of developing age-associated manifestations and/or pathologies.